

01 APR 2005

(43) International Publication Date
15 April 2004 (15.04.2004)

PCT

(10) International Publication Number
WO 2004/032460 A3(51) International Patent Classification⁷: H04Q 7/22(21) International Application Number:
PCT/KR2003/001703

(22) International Filing Date: 22 August 2003 (22.08.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10-2002-0059951 1 October 2002 (01.10.2002) KR

(71) Applicant (for all designated States except US): SK TELECOM CO., LTD [KR/KR]; 99, Seorin-Dong, Jongro-Ku, Seoul 110-110 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HAHM, Hee Hyeok [KR/KR]; 705-2602, Shindong-A River-Park, Noryangjin-dong, Dongak-gu, Seoul 156-050 (KR). KIM, Ki

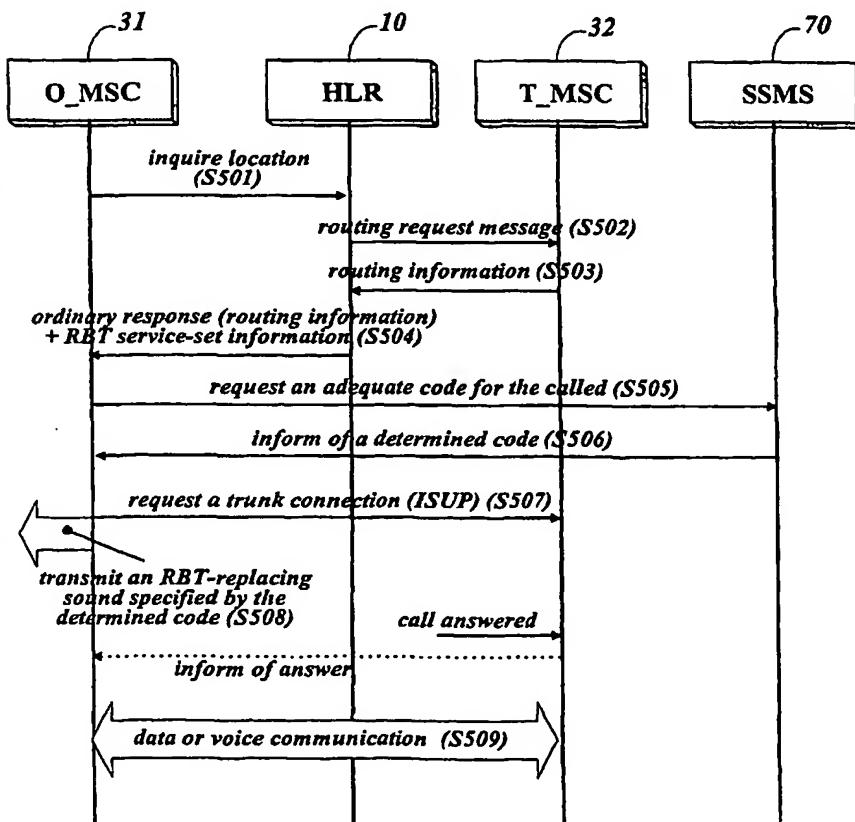
Mun [KR/KR]; 202-401, Shinmyung-Boram Apt., 497-1, Boogae 3-dong, Boopyung-gu, Incheon-si 403-103 (KR). LEE, Sang Yun [KR/KR]; 109-802, Saetbyul Apt., BUNDANG-dong, Bundang-gu, Seongnam, Kyunggi-do 463-030 (KR). NO, Yeong Tae [KR/KR]; 201, Choongang Apt., 1684-9, Shinrim 12-dong, Gwanak-gu, Seoul 151-796 (KR). PARK, Jae Young [KR/KR]; 2938 Sungnam-dong, Joongwon-gu, Sungnam-si, Kyunggi-do 462-130 (KR).

(74) Agent: PARK, Lae Bong; 1Fl., Dongun Bldg., 413-4, Dogok 2-dong, Kangnam-gu, Seoul 135-272 (KR).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: METHOD FOR PROVIDING A SUBSCRIBER-BASED RINGBACK TONE SOUND STORED IN A MOBILE EX-CHANGER



(57) Abstract: The present invention relates to a method for providing a caller with an arbitrary sound pre-stored in an exchanger that is chosen by a called subscriber instead of a conventional RBT (RingBack Tone). The present method comprises: a first step, conducted by an HLR (Home Location Register) when a location request message is received from a call-originating exchanger because of call connection request to a terminal, of furnishing a call-terminating exchanger with information on whether or not an RBT is to be replaced for the terminal through a routing information request message that is sent to the call-terminating exchanger; and a second step, conducted by the call-terminating exchanger when a trunk connection request from a call-originating exchanger is recognized, of searching for a sound code assigned to the terminal based on the information, and providing a caller with a pre-stored RBT-replacing sound associated with the found sound code as an RBT.

WO 2004/032460 A3



(84) **Designated States (regional):** ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(88) **Date of publication of the international search report:**
24 June 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2003/001703

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 H04Q 7/22

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
H04Q 7/34, H04Q 7/38, H04M 1/56, H04M 3/42

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
KR, JP: IPC as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KR 2000-000244 A (PARK, JONG-HYUN) 15 JANUARY 2000, see whole description.	1-3
A	KR 2001-108937 A (CHAE KYUNG-MIN) 08 DECEMBER 2001, see whole description.	1-3
A	KR 2000-30035 A (KIM KANGSUK) 05 JUNE 2000, see whole description.	1-3
A	KR 2000-55316 A (YOON SEOK KYU) 05 SEPTEMBER 2000, see whole description.	1-3
A	US 5926537 A (ERICSSON INC.) 20 JULY 1999, see abstract, whole description.	1-3
A	JP 2001-106685 A2 (NTT MOBIL COMMUNICATION NETWORK INC.) 11 APRIL 2000, see abstract.	1-3
A	JP 2000-50347 A2 (NEC CORP.) 18 FEBRUARY 2000, see abstract	1-3
A	WO 2000-42763 A1 (KIM, KANGSUK) 24 AUGUST 2000, see whole document	1-3
A	KR 2002-39501 A (LG ELECTRONICS INC.) 27 MAY 2002, see whole description	1-3

 Further documents are listed in the continuation of Box C. See patent family annex.

- * Special categories of cited documents:
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

22 MARCH 2004 (22.03.2004)

Date of mailing of the international search report

23 MARCH 2004 (23.03.2004)

Name and mailing address of the ISA/KR


Korean Intellectual Property Office
920 Dunsan-dong, Seo-gu, Daejeon 302-701,
Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

JEON, Hyun Jin

Telephone No. 82-42-481-5970

